Rheedea
Vol. 13
39-41
2003

Eugenia terpnophylla Thw. (Myrtaceae) : A New Record for India

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Abstract

Eugenia terpnophylla Thw., a Sri Lankan Myrtaceous tree species is reported first time for India from Thiruvananthapuram and Pathanamthitta districts of Kerala, the southern Western Ghats. Densely pubescent young shoots, peduncles and clustered axillary flowers distinguish this species from the allied *E. thwaitesii* Duthie and *E. heynei* (Spreng.) Rathakr. & N. C. Nair. Description and illustration of the species are given.

Keywords: *Eugenia terpnophylla*, New record, Sacred grove, Kerala

Introduction

The pantropical genus *Eugenia* L. has about 1000 species distributed mainly in the New World (Mabberley, 1990). This genus is taxonomically more related to *Syzygium* and their generic delimitations were under long debate until Schmid (1972) differentiated them convincingly providing adequate morphological and anatomical characters. There are already 13 species of *Eugenia* in Peninsular India including the seven endemics (Nayar, 1987). We record here one more species, *Eugenia terpnophylla* Thw., for India so far thought to be endemic to Sri Lanka.

As part of the ongoing floristic explorations in Kerala, one of us (ESSK) stumbled upon a few interesting specimens of *Eugenia* collected from the sacred groves of Thiruvananthapuram district. On critical study and perusal of literature, these specimens were identified as *Eugenia terpnophylla* Thw. Later this identity was confirmed with a Sri Lankan type specimen (*C.P. 2623*) housed at Botanical Survey of India, Coimbatore (MH). The occurrence of this Sri Lankan species in the Southern Western Ghats forms a new distributional record for India. We provide a short description, illustration, pertained notes and keys to facilitate its easy identification.

Eugenia terpnophylla Thw., Enum. Pl. Zeyl. 114. 1859; Duthie in Hook. f., Fl. Brit. India 2: 503. 1879; Beddome, Icon. Pl. Ind. Or. 67. t. 283. 1874; Trimen, Handb. Fl. Ceylon 2: 181. 1894; Alston in Trimen, Handb. Fl. Ceylon 6: 119. 1931; Ashton in Dassanayake & Fosberg (eds.), Rev. Handb. Fl. Ceylon 2: 417. 1981. **Fig. 1. a-h.**

Medium sized trees, to 2 m tall, branchlets pale brown, terete; young shoots fulvous-tomentose. *Leaves* elliptic or elliptic-lanceolate, 5-12 x 1.5-4.5 cm, cuneate at base, obtusely caudate - acuminate at apex, hardly revolute at margin, thinly chartaceous, drying pale brown; lateral nerves 6-10 pairs, slender and raised beneath, ± obscure above, intramarginal nerves obscurely looped, tertiary nerves obscurely and laxly reticulate, midrib very slender, prominent beneath; petiole to 10 mm long, slender, drying black. *Flowers* white, on short bracteate peduncles in axillary clusters; bracts and bracteoles linear, 1.5–2 mm long; peduncle to 0.5 cm long, fulvous-tomentose; pedicels slender, to 5 mm long, terete; calyx to 3 mm long, campanulate; lobes 4, deltoid, acute at apex, 3 x 2 mm, fulvous-tomentose; petals 4, narrowly elliptic–oblong, obtuse at apex, 4 x 2 mm, ciliate along the margins; stamens many, inserted on the calyx limb; filaments filiform, 3 - 6.5 mm long; anthers elliptic, to 0.5 mm long, ovary 2-celled, to 2 mm long, fulvous-tomentose; ovules many in each cell, in axile placentation; style slender, to 4 mm long, glabrous. *Berry* globose, to 9

mm across, crowned with calyx segments; seed(s) 1-4.

Flowering & Fruiting: March – October.

Distribution: India (The Western Ghats of Kerala) and Sri Lanka.

Habitat: *Eugenia terpnophylla* is found occasionally at altitude between 700 and 1000 m in association with *Cinnamomum sulphuratum* Nees, *Garcinia imbertii* Bourd., *Cinnamomum filipedicellatum* Kosterm., *Diotacanthus grandis* Benth., *Psychotria thwaitesii* Hook.f., *Hedyotis travancorica* Bedd., *Symplocos wynadense* (O. Kuntze) Nooteb. etc. in the evergreen forests of Thiruvananthapuram and Pathanamthitta districts. It is also found at altitudes between 20-40 m. in the sacred groves of Thiruvananthapuram district associated with

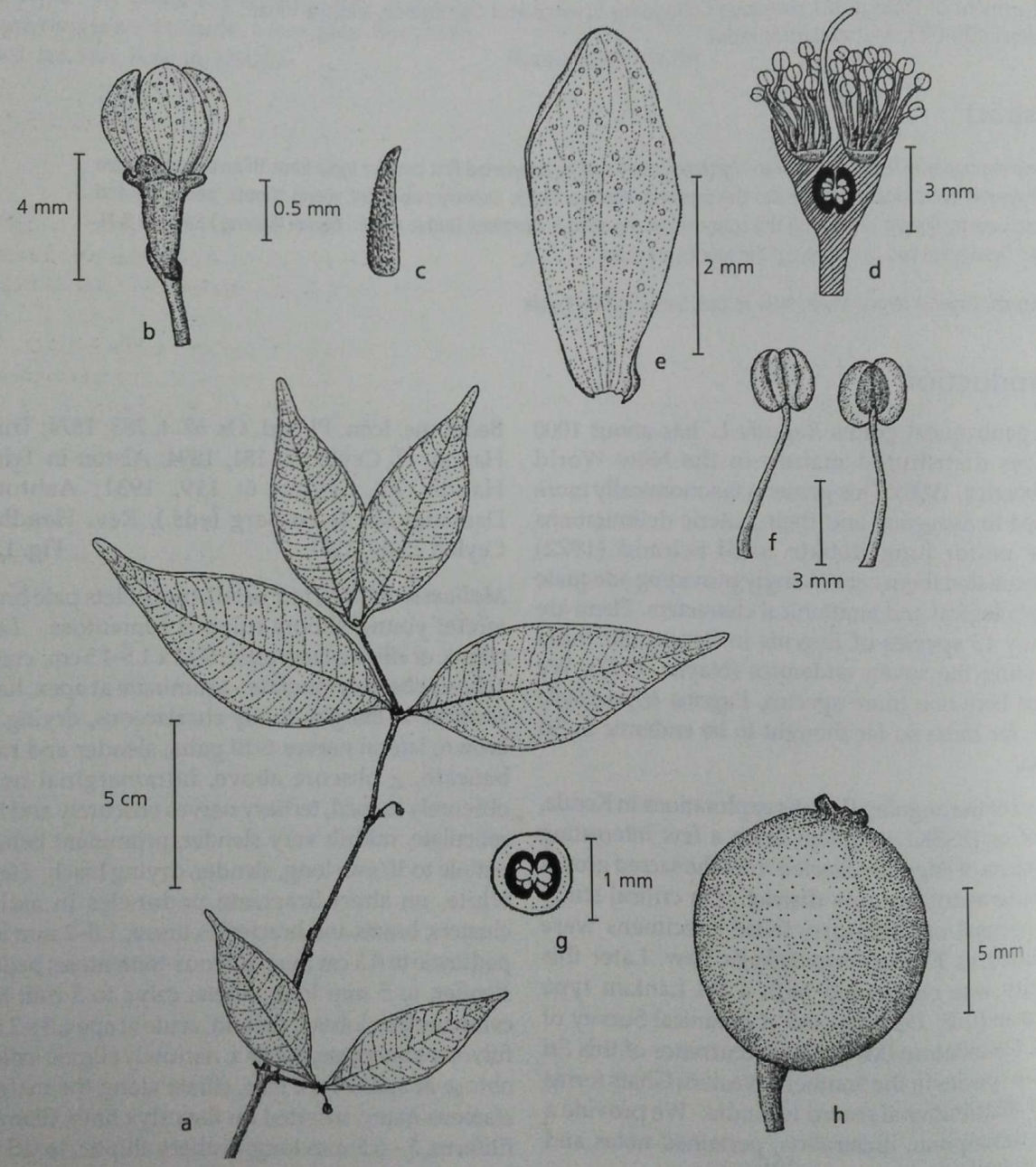

Figure 1. *Eugenia terpnophylla* Thw. – a. Habit; b. Flower; c. Bract; d. Flower, longitudinal section, petals removed; e. Petal; f. Stamens; g. Ovary, cross section; h. Fruit.

Memecylon umbellatum Burm.f., *M. wightianum* Triana, *Hydnocarpus pentandra* (Buch.-Ham.) Oken, *Cinnamomum malabathrum* (Burm.f.) Bl., *Holigarna arnottiana* Hook. f. etc.

Specimens Examined: INDIA, **Kerala**, Thiruvananthapuram District: Keezhetti Kavu, Pongumoodu, 40 m, 11.06.1998, *Santhosh 42327* (TBGT); Pulickal Bhagavathy Kavu, Pongummoodu, 40m, 13.06.1998, *Santhosh 42338* (TBGT); Kudavoor Sri Bhagavathy Kavu, Kazhakkoottum, 20m,7.09.1998, *Santhosh 42387* (TBGT); Sri Darmasastha Kavu, Karyavattom, 20 m, 9.08.1998,*Santhosh 42353* (TBGT); Chemunji, 1000 m, 22.10.2001, *Santhosh 48412* (TBGT). Travancore: Panachi Teak plantation, 19.03.1913, *Rama Rao 1009* (TBGT). SRI LANKA, Kandy District: Ambagamuwa, *s. coll. C.P. 2623* (MH, type).

Notes: Thwaites (1859) described *Eugenia terpnophylla* based on specimens from Ambagamuwa in Kandy district, Ratnapura and Reigam Korale. Ashton (1981) mentioned that Alston reported it from Kitulgala. All these collections were from the wet lowlands of Ceylon (Sri Lanka).

The first collection of this species from India, dates back to 1913 when Rama Rao of Forest Department recorded it from Panachi teak plantation, Pathanamthitta district. Ashton (1981) distinguished this species from related *E. fulva* Thw. of Sri Lanka in having more slender twigs, smaller chartaceous and glabrous lamina with fewer lateral nerves, linear bracts, campanulate calyx, narrowly elliptic-oblong petals and shorter stamens. This species can be distinguished from its allied Indian species *E. heynei* (Spreng.) Rathakr. & N. C. Nair and *E. thwaitesii* Duthie as follows:

1a. Young shoots and peduncle glabrous..... .....*E. thwaitesii*

1b. Young shoots and peduncle densely pubescent. 2

2a. Flowers in reduced terminal racemes..... .....*E. heynei*

2b. Flowers in axillary clusters.....*E. terpnophylla*

Acknowledgements

The authors are grateful to Prof. (Dr.) G.M. Nair, Director, Tropical Botanic Garden and Research Institute for facilities and constant encouragements; Joint Director, Botanical Survey of India, Coimbatore for giving permission to consult the Herbarium and to the Principal and Head of Biology Department, K.J. Somaiya College, Mumbai for their timely help.

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Received 16.8.2001